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This study looked at the relationship of prior-to-service biographical data, medical histories from Military Entry Processing Stations (MEPS), neuropsychological functioning, and medical utilization at basic training (BT). One goal was to see if women who successfully graduate from BT differed from nongraduates in terms of prior-to-service or in-service medical and psychological characteristics. A second goal was to measure women's responses to the stresses associated with military training by analyzing patterns of medical resource utilization and reporting of psychological symptoms. Subjects consisted of 1417 females and 820 males. Several databases were developed to measure the above variables. Results indicate that medical utilization is significantly different between men and women, even though both groups have basically the same pattern of complaints. There were no meaningful ethnic patterns of medical utilization or attrition. Information from MEPS is useful in predicting medical utilization. Discussion focuses on possible intervention techniques and the need to investigate ways to more effectively utilize the data already collected at MEPS.

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FOREWORD

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Edna R Fiedler 19 Nov 96

PI - Signature Date

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DEFENSE WOMEN'S HEALTH RESEARCH PROGRAM
PREDICTING MILITARY INDUCED
STRESS RESPONSES IN SERVICEWOMEN[1,2]

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Little is known about the physiological and psychological characteristics of servicewomen. Even less is known about their responses to the stress of military training. Because all enlisted women must successfully complete both basic and advanced training as a prelude to their military career, this period is critical in determining the long-range composition of the female enlisted force. An understanding of the factors contributing to noncompletion would be invaluable for screening potential recruits, managing trainees, and planning resource allocation. Systematic observation of women subjected to the stress of military training will also generate useful data for modeling potential combat scenarios.

This study looked at the relationship of prior to service autobiographical data, medical histories from Military Entry Processing Stations (MEPS), and basic training (BT) neuropsychological functioning and medical utilization. One goal was to see if women who successfully graduate from BT differed from nongraduates in terms of prior-to-service or in-service medical and psychological characteristics. This paper describes women who do and do not graduate from training.

A second goal was to measure women's responses to the stresses associated with military training by analyzing patterns of medical resource utilization and reporting of psychological symptoms. This paper reports on how female trainees utilize the health care system including presenting complaints, treatments, and dispositions. Patterns of medical and mental health care needs are compared across gender and ethnic groups.

METHOD

Subjects. Subjects consisted of 1417 females and 820 males, 98% having at least completed high school and 40% having completed at least some college, and an average AFQT percentile of 66%. As regards marital status, 85% were single. Of those for whom racial background information

[1]Thanks to Doug Stordy, CMSgt, Ret, whose invaluable help in collecting and merging the many medical and MEPS databases made this study a reality. Also, thanks to Steven Jirka, M.A. for his assistance in database development and Elizabeth Resendez for her patient editing and typing expertise.

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was available, 74% were Caucasian, 19% were Black, 7% were Other; and for 8% there was no information on racial background. See Table 1.

Table 1
Subjects Background

	Females	Males	Combined
Education	N / %	N / %	N / %
9-11th grade	14 / 01%	7 / 01%	21 / 02%
High School	822 / 58%	496 / 61%	1318 / 58%
Some College	581 / 42%	317 / 38%	898 / 40%
AFQT Mean	65%	69%	66%
Marital Status			
Single	1193 / 84%	714 / 87%	1907 / 85%
Married	224 / 16%	106 / 13%	330 / 15%
Race			
Caucasian	912 / 70%	616 / 80%	1528 / 74%
Black	294 / 23%	96 / 13%	390 / 19%
Other	94 / 07 %	55 / 07%	149 / 07%
Handedness			
Right	1258 / 89%	707 / 86%	1965 / 88%
Left	129 / 09%	83 / 10%	212 / 10%
Ambidext.	30 / 02%	20 / 04%	60 / 03%
Total Number	1417	820	2237

Instruments. Several measures and or databases were used to gather information.

1. *History Opinion Inventory (HOI)*. This self-report questionnaire, routinely administered to all basic trainees, assesses prior-to-service biographical data regarding: antisocial behavior; social withdrawal; emotional stability; emotional composure; family, school success, and immaturity.

2. *MicroCog*. A computer-administered and -scored test, *MicroCog* samples a variety of important neurocognitive functions. Its 18 subtests can be completed in about 45 minutes, generating nine Index Scores in addition to individual subtest scores. These indices include Attention/Mental Control, Memory, Reasoning/Calculation, Spatial Processing, Reaction Time, Information Processing Speed, Information Processing Accuracy, General Cognitive Functioning and General Cognitive Proficiency.

3. *Medical Records*. Number of visits to the recruit outpatient clinic, reasons for the visit, number of days in the hospital, and pertinent diagnoses were collected. As these data are not computerized, the medical chart of each individual in the study was reviewed and data was hand

entered into a database. Mental health records from the recruit mental health evaluation service were reviewed to collect information on those recruits who did complete a psychological evaluation.

4. *Military Entry Processing Stations data (MEPS).* Data from the recruits' MEPS forms were collected by hand and entered into a database.

5. *Graduation and attrition data.* Graduation or attrition data from BT were collected on each individual and entered into a database. Subjects were then tracked for three months after the end of the study to see if any of them attrited during the first few months of technical school.

Procedure.

1. The HOI is routinely given the first day of in processing to all basic trainees. All HOI scores were entered into a database for all recruits who completed the *MicroCog.*

2. The *MicroCog* was given early in the morning during the first week of basic training just before the recruits attended routine briefings. Subjects were administered the neuropsychological battery in group format on personal computers. Recruits completing the *MicroCog* constituted the recruit sample.

3. Utilization of medical, psychiatric, and psychological facilities was determined by checking the medical and mental health charts of recruits who completed the *MicroCog*. Inpatient and mental health information were hand entered into a database. These charts were monitored for three months after *MicroCog* data collection to insure capturing all records on all sample subjects. Outpatient data were hand entered into a computerized database by AF Recruit Fitness Project, Office of Preventive and Health Services and Assessment/AL/Brooks AFB and the Battelle Memorial Institute.

4. MEPS data were collected for each subject and entered into another database.

5. The roster of those discharged before graduation is routinely entered into a database as part of the validation of the HOI-R. All subjects' active duty status was tracked for three months after the study to see if anyone received a discharge early in technical school.

Technical analyses will include descriptive, inferential, and regression analyses. Given the large sample size, only significance at the .01 level or better will be accepted.

RESULTS

MicroCog..

Gender differences. There were significant differences between men and women on six of the nine age-corrected general population *MicroCog* Summary Indexes. As a group, women scored higher than men on the Attention, Memory, Information Processing Speed, General Cognitive Functioning, and General Cognitive Proficiency indices. Men scored higher than women only on the Spatial Processing index. There were no differences between men and women on the Reasoning,

Reaction Time, and Information Processing Accuracy indices. No significant differences were found for ethnicity (170 cases had no ethnicity data). See Table 2 below.

TABLE 2
MicroCog Indexes by Gender

	Female n=1419 Mean/SD	Males n=818 Mean/SD	Total n=2237 Mean/SD	p< F	t
Attention	101.96 12.40	97.9 19.5	100.50 15.50	.0001	.001
Reasoning	100.89 12.02	101.16 15.96	100.99 13.60	NS	NS
Memory	107.84 13.37	104.63 13.76	106.67 13.59	.001	.001
Spatial Processing	98.55 10.85	99.82 10.38	99.02 10.70	.001	.01
Reaction Time	100.08 14.92	100.16 22.27	100.11 17.96	NS	NS
Information Processing Speed	104.8 11.16	101.22 15.53	103.51 13.04	.0001	.001
Inform. Processing Accuracy	95.04 13.25	94.86 16.41	95.07 14.40	NS	NS
General Cognitive Functioning	99.98[2] 12.20	97.74 16.01	99.16 13.75	.001	.001
General Cognitive Proficiency	99.20[3] 11.79	97.52 15.43	98.59 13.27	.005	.01

Ethnic Differences. There were no significant differences between ethnic groups on any *MicroCog* Index. See Table 3 below.

Table 3
Microcog Indexes by Ethnicity

	Cauc n=1528	Black n=390	Other n=149
Attention	101.89 14.29	96.56 18.515	97.63 16.43
Reasoning	102.43 13.30	95.28 13.51	100.60 13.92
Memory	108.13 13.30	101.71 13.51	103.36 13.92
Spatial Processing	100.61 9.96	93.38 11.70	98.60 13.92
Reaction Time	101.75 16.06	95.85 21.62	97.19 18.82
Information Processing Speed	105.19 11.60	97.30 15.85	101.70 13.42
Information Processing Accuracy	96.28 13.84	90.81 15.87	93.82 13.82
General Cognitive Functioning	101.10 12.50	92.42 15.62	97.16 13.66
General Cognitive Proficiency	100.50 12.26	91.92 14.56	97.01 13.02

Prior-to-Service Measures

Gender and Ethnic Differences. There were no significant gender or ethnic differences on prior-to-service medical or Biodata measures (MEPS, HOI-R). Overall, female and male recruits entering the USAF, despite different ethnicity and regional backgrounds, are fairly homogeneous as regards cognitive functioning, medical histories, and self reported behaviors

Medical Utilization.

Gender Differences. There was a significant difference between men and women on number of visits to the clinic. On the average, women made one more visit to outpatient clinic for sick call than men. However, the mean number of visits for both sexes was less than two. No gender differences were found on number of days in the hospital, or symptoms reported at MEPS, nor on the biodata survey (HOI-R). See Table 4 below.

TABLE 4
Medical and HOI-R Information

	Female n=1419 Mean/SD	Males n=818 Mean/SD	Total n=2237 Mean/SD
HOI-R	9.8 .81	9.8 .88	9.8 .84
MEPS SF93,Q#11	.84 1.15	.83 1.04	.83 1.11
MEPS SF15, Q #15-24	1.11 1.13	1.12 1.11	1.11 1.12
MEPS SF88, Q #18-43	1.03 .87	1.13 .96	1.07 .91
Hosp days	.21 2.08	.10 .98	.17 1.76
# Visits[1]	1.34 2.52	.65 1.65	1.09 2.27
% Fem Dis	13%	N/A	N/A

[1] F for gender significantly different, p.< .0001

Characteristics of women who enlist in the United States Air Force

Demographics. Almost all women in the sample completed high school, with 70% of them being Caucasian, 23% Black, and 07% of Other ethnic backgrounds, and most of them were unmarried, although 16% were married. As Table 1 shows, these demographic trends were about the same as for the males, although there were slightly more males who were Caucasian and unmarried males.

Cognitive Functioning. The *MicroCog* scores show that cognitive functioning of entering basic trainees falls within the average range of functioning. Average AFQT scores was 65, with a median score of 63 (n=1294).

Medical and psychological characteristics. According to their self reports at MEPS, 51% of women (n=727) denied any prior medical history on SF93 question 11. Another 40% women (n=575) admitted to only one or two past conditions. In response to SF questions 15-24, 39% denied any such conditions, while another 48% admitted to one or two of the items. In the clinical evaluation as recorded on SF88, 95% had between 0-2 symptoms. A compilation of total number of medical history symptoms as reported at MEPS showed that 11% of women had no symptoms, with the modal number of symptoms being three and the median being two symptoms. Only 13% of women reported either being treated for a female disorder or change in menstrual pattern. As regards suicide, .2% or 3 women admitted a suicide attempt.

Vulnerability to stress can be seen in some of the responses to the HOI-R. First, 3% or 48 women admitted to having contemplated suicide, 6% of females had been arrested and 20% admitted to illegal drug use. The question did not ask which type of illegal drug, but the authors assume that almost all of these were marijuana experiences. About 70% of women were more extraverted than introverted.

Academically, 80% of females admit to having lost interest in school work with 50% failing at least one course in high school. However, 55% say they had a B or better average and 78% reported it was easy to keep up with the other students. Only 23 women did not have a high school diploma.

As regards to family issues, 60% of the women stated that their parents, when they were in a bad mood, did not take it out on the children, 80% stated their family was always ready to help each other, 72% believed their family was supportive when they had problems, 64% reported they did not have a lot of arguments with their parents, 76% said they were not often punished, and 80% felt their parents respected their opinions.

How do women use medical resources during training?

Number of visits to outpatient troop clinic. Compared to men who averaged .65 visits, women had a significantly higher average of 1.34 sick call visits to the recruit outpatient clinic. While 80% of women made two or fewer visits, 90% of men made 2 or fewer visits. Of those people who made more than 10 visits, 27 were women, and three were men

Most frequent presenting problems and diagnoses. The median and modal response for both men (76%) and women (62%) was no sick call visit at all. For those recruits who went to the clinic for sick call, the top three reasons for women on their first visit to the clinic were blisters (12%), congestion (9%), and ankle problems (8%). For men, they were the same: blisters and congestion (each 12%), and ankle problems (8%). For those who had a second sick call, women and men again both had congestion as their number one reason (12% and 10% respectively). On the third visit, congestion was number one for women (10%) and men (6%). Blisters, knee or ankle problems, congestion, and headaches accounted for between 34% and 40% of sick call reasons during the first three visits for both men and women. Over all sick visits, an analysis of diagnoses showed that 26% of women and 21% of men had congestion, 20% of women and 16% of men had problems with blisters, 18% of women and 13% of men had ankle problems, 5% women and 10% men had knee problems, and 10% of women and 13% of men had headaches. None of these gender patterns were significantly different.

There was no single diagnosis that accounted for more than 2% of the reasons for the 20% of women and 12% of men who made 5 or more visits to sick call. It would appear that the number of visits, rather than actual diagnosis, is the better predictor of discharge.

Women's reasons for sick call did not significantly differ from men, but women utilized sick call resources more. No significant ethnic differences were found.

Of the 1,419 women in the study, only 27 had a female disorder as the reason to go to the clinic: vaginal problems (n=2), yeast infection (n = 16), irregular menstruation (n=9), and only one

woman had more than one problem (yeast infection and dysmenorrhea). No one in the sample was pregnant.

Referral from the clinic. 75% of women and 80% of men treated at sick call were not referred elsewhere. Most other referrals were either back to the clinic (6% and 7% respectively), to orthopedics (4% female, 2% male), or podiatry (7% female, and 4% males). Referral back to the clinic is common practice in the case of blisters or for a follow up check up on some other medical problem.

Days in the hospital. Significant relationships were found between number of days in the hospital and number of symptoms reported in SF93, Question 11 ($r = .12$, $df = 1419$, $p. < .0001$) at MEPS. Examination of the data reveals that while 2% of those reporting no symptoms on SF93 spent one night in the hospital, 11% of those reporting four or more symptoms spent at least one night in the hospital, (ChiSq = 71.85, p.< .00001). Number rather than type of symptom was again the relevant variable.

Women and Discharge from Basic Training

Nonsignificant variables. There were no significant differences between AD and Disch for gender, race, AFQT, graduating or not graduating from H.S., any of the *MicroCog* subscales, handedness, or for average number of symptoms as reported on the MEPS medical history forms.

Days in the Hospital and Discharge. Not surprisingly, for those 31 women hospitalized, number of days in the hospital were significantly related to discharge ($F=10.19$; $p. < .0001$). Whereas 9% of women who did not spend one day in the hospital were discharged, 25% of those women spending one day in the hospital, 50% of those spending four to five days, and 99% of those spending over five days were discharged.

Visits to the Clinic and Discharge. Whereas 7% of women who did not go to sick call attrited, 14% of the 540 women who made at least one visit to the troop clinic attrited (with continuity correction, ChiSq = 22.9, p. < .0001). Generally speaking, the probability was one out of every five women who visited sick call more than four times would be discharged.

Mental Health Evaluation and Discharge. Of all female recruits, 14 were seen at the troop mental health clinic. Five of these 14 were both recommended for return to duty and later graduated. The other nine women, or 64% of those women seen at the mental health clinic, were eventually discharged. Six of them received a mental health discharge, while the other three received a discharge for other reasons.

Relationship Between Psychological Evaluation and Medical Utilization. Two women returned to duty after a psychological evaluation and graduated were also seen at the regular troop clinic and hospitalized for non mental health reasons. The other three women returned to duty had no record of sick call or hospitalization. Three of the nine women who received a psychological evaluation and were discharged did go to sick call. None of the nine women seen at the mental health clinic and later discharged were hospitalized.

Prior to Service BioData (HOI-R) and Attrition . There were significant differences between female recruits who remained on active duty and those who were discharged (F=3.07, p. <.01; t= -3.21, p. <.005). The HOI-R is used to screen basic trainees, with those recruits scoring above a critical cutoff going on to a more in-depth screening procedure. Those recruits who score below the cutoff simply continue with training. Of women who graduated, 92.4% were below the cutoff score on the HOI-R. Of women who were discharged, 15.7% were above the cutoff. Both of these rates are better than the base rate 9.6% attrition and /or 90.4% graduation.

The HOI-R contains 8 clinical scales and one validity measure. Three of the eight clinical scales were significantly different for discharged vs active duty females: Emotional composure (t=-2.69; p. < .01); immaturity (t=-2.36; p. <.01); and emotional instability (t=-3.94; p.< .001).

Medical Utilization, Prior to Service BioData Information and Attrition

Attrition for any reason. Number of days in the hospital, number of visits, and the HOI-R scale scores were entered into a backward linear regression model to predict female attrition. The variables of number of visits, antisocial behaviors, and withdrawnness accounted for 58% of the variance (R SQ =34, F= 4.66, p. <.01).

A logistic regression model was developed that correctly predicted 14 or 10% of the 136 female attrites, with the variables of total visits, number of days in the hospital, and three scales of the HOI-R (emotional composure, conflict with parents, and emotional instability). The model correctly identified 99.7% of the active duty females, for a total percent correct of 91%.

Mental Health Attrition. There were 24 women attrites for mental health reasons. The additional number of women in the mental health attrition group compared to the number of women seen at the mental health outpatient troop clinic is accounted for by a number of women going directly to inpatient status from the squadrons.

Days in the hospital. The average number of days in the hospital for mental health attrites was 7 days, compared to less that one day for all other recruits (F=531.017; p.< .001; t=23.03, p. < .001).

SF83, question 11. There was a significant difference in the number of symptoms reported on SF83, question 11, with female mental health attrites averaging 1.4 symptoms, and non-mental health attrites average .83 symptoms (F=27.07; p. < .001). Whereas 17% of mental health attrites had four or more symptoms on the MEPS question, only 3% of all female recruits that were not mental health attrites had four or more symptoms. None of the three women who admitted to a prior suicide attempt at MEPS were discharged for mental health reasons. Responses to suicide on the HOI-R show that only two of the 43 women who had seriously thought about taking their life more than once received mental health discharge.

There were no significant differences on age, education, number of visits, AFQT, ethnicity, or *MicroCog* scales except for a trend for reaction time, with female mental health attrites having a lower mean score of 93.6 compared to a mean of 100.4 for everyone else .

DISCUSSION AND CONCLUSIONS

Description of the typical recruit

Basic training is a stressful environment, both physically and psychologically. The incoming female recruit who enters with stress resistant qualities and emotional resiliency will be better adapted to sucessfully cope with the challenges that face her. She should be intelligent enough to deal with the academic requirements, resilient enough to bounce back from the emotional pressures of being in a military environment, and healthy enough to thrive in the physically demanding world of training. By and large, the average female recruit possesses these qualities.

The prototype woman entering the Air Force basic training is a Caucasian or Black of average intelligence, with about two or three reported medical conditions, usually unmarried, possessing at least a high school degree and perhaps some college. About one half the women will have had a B or better grade point average, but about one half will also have failed one class in high school. Although most of them said it was easy to keep up with the other students, most of them reported being bored or losing interest in school.

One aspect of stress resistance is the existence of a social support system. Most women felt their parents were supportive, respected their opinions, did not have a lot of arguments, and were non punitive. Furthermore, they saw their families as always ready to help each other. However, a few of the females entering the Air Force (USAF) reported a history of vulnerability to stress as seen by those women who have contemplated suicide, been arrested, used illegal drugs, describe themselves as more emotionally vulnerable, or with excessive family discord.

Neuropsychological findings

Neuropsychological test results for a large group of Air Force trainees support previously published findings that describe gender-related cognitive differences. Women have traditionally performed superior to men on verbal tasks, while men have scored higher than women on spatial measures. The test battery employed in our study is heavily weighted toward verbal skills and, indeed, women did outperform men on five of nine indices: Attention, Memory, Information Processing Speed, General Cognitive Functioning, and General Cognitive Proficiency. Men, on the other hand, earned higher scores than women the only spatial index (Spatial Processing). It should be noted that, while statistically significant, these group differences are so small as to be clinically meaningless. All group index scores fell in the average range.

There were no statistically significant neuropsychological discrepancies between ethnic groups in our sample. Because the Psychological Corporations's normative data for *MicroCog* did show ethnic differences, our finding is an independent confirmation that Air Force recruitment standards are being applied to all applicants without regard for ethnic background

Medical Utilization

Gender differences. Medical utilization is one of the most expensive components in basic training. Common knowledge has it that more women go to the doctor and go more often, with the

implication of more severe illness or "female problems." In fact, in this study, women did go to sick call more, but not because of gender specific disorders. Indeed, there were very few differences in the reasons men and women went to sick call. Both men and women suffered almost equally from foot, ankle problems, congestion, and headaches.

Implications for intervention. Recent studies have found that women respond to stress by a more dramatic drop in the effectiveness of the immune system. Generalizing this to the current sample, female basic trainees could literally take longer to get over the congestion, ankle problems, and blisters that made them go to the provider in the first place.

Early and aggressive intervention for blisters or congestive conditions could go a long way to reducing the need for multiple visits to the clinic. One suggestion is to train recruits in a buddy system for blister check similar to the US Marine Corp policy. A second suggestion is the distribution of clearly noticeable education posters or pamphlets. Both of these are cost effective and could reduce the strain on medical personnel and the detrimental effect on the individual and training command of continued visits to the clinic for blisters. San Antonio could easily compete for allergy capital of the United States, and aggressive treatment of early congestive problems should be discussed with the relevant medical experts. The USAF rightly prides itself on the quality of its barracks, but there might still be room for improvement as regards air circulation and climate control.

MEPS information. The finding that number of self reported medical conditions reported at MEPS is related to number of days in the hospital indicates that the SF93 contains useful information that could be refined to determine the person's level of risk for entering the hospital. Since number of days in the hospital is predictive of discharge, the examination at MEPS takes on even more significance. More investigation into the relationship of MEPS disclosure to excessive medical utilization would benefit the recruiter in making decisions. Since the recruiter does not have access to the medical charts of the basic trainee, it is difficult for the recruiter to know exactly what to look for in the way of how number of prior-to-service conditions are related to hospitalization. This part of the research was very labor and time intensive as all data was hand entered from the MEPS documents and the medical charts. Nonetheless, this relationship needs to be studied in depth, and the information gotten back to the individual recruiter or examining physician in the field. It is proposed that there be a joint effort between USAF Surgeon General and Air Education and Training Command to further investigate this issue and implement findings.

Attrition

One of the more interesting results is how few variables actually are related to discharge. Education, age, race, gender, handedness, cognitive functioning as measured by AFQT and *MicroCog* do not predict success in basic training. Perhaps in given job specialties, some of these variables would be relevant, but not for general success in an entry level training program teaching military information, self discipline, cooperative work habits, values, and physical conditioning.

The lack of a clear pattern in attrition is interpreted as showing the overall effectiveness of MEPS. That is, MEPS does not appear to be missing some specific group of women. Rather, there

may be some subtle combination of low level prior medical hisotry combined with lowered stress resistance that is responsible for some of the discharge rate of basic trainees.

What seems to be important in basic training is the person's physical health as measured by sick call and days in the hospital, as well as prior-to-service psychological patterns marked by lowered emotional resilience and parental conflict. It is evident that those recruits who develop physical complaints requiring more than the average time away from their unit in a hospital or clinic setting are more likely to attrite.

What is not clear is the reason. The authors point out that it may not be the severity of the complaint but the combination of physical complications plus the amount of time away from the unit. Once a recruit is separated from her flight, she is both isolated from peers, and treated like a patient. Two social psychological phenomena occur: lack of social support (for the goal of graduation) and the secondary gain of being a patient.

The results of the logistic regression indicate that a woman's self reported prior-to-service increased vulnerability to stress and conflict with parents interacts with the number of visits and days in the hospital in predicting who will be discharged.

The authors suspect that there are three groups of women being discharged that are targeted by this logistic regression model. One group are those who have some sort of clear cut medical disqualification. A second group of women may have started out with some medical problems, but somehow, during the process of treatment and separation from their squadron, psychological complications became mixed in with the medical picture. A third group are those women already more psychologically vulnerable than their peers before entering basic training, and for whom medical complications are minor or non existent.

All of these groups will be particularly susceptible to basic training stress. If women from either of the last two groups are hospitalized for some reason, however , they will be particularly receptive to the detrimental effects of isolation from peers and the secondary gain of being a patient.

Anyone with a clear medical or psychological disqualification should be discharged, as that is the whole purpose of medical standards. However, there may be a group of young 19 year old women who, although coming from a background of familial discord and increased vulnerability to stress, could become productive Air Force enlisted personnel with the appropriate social support and empowerment developed in basic training. Development of an alternative method of helping these women besides complete removal from their work environment and peer support might benefit both the individual and the Air Force.

Recommendations. Below is a summary of recommendations discussed in detail above.

<u>Excessive medical utilization</u>.

Train recruits in a buddy system for blister check similar to the US Marine Corp

Distribution of posters or pamphlets for blister management

Possibly develop an aggressive treatment of early congestive problems

Investigate the benefits of improving air circulation and climate control in barracks

Joint effort between USAF Surgeon General and Air Education and Training Command to further investigate more in depth the relationship of MEPS prior medical history and excessive medical utilization.

Make sure to pass the results on to recruit command so the individual recruiter or physician can use findings

Attrition

Development of an alternative method of helping less severe medical and or psychological complications such as the attempts going on at Great Lakes Navy Training Depot to avoid complete removal from their peer support in the work environment and identification as a patient. .